

AMENDMENTS TO THE CLAIMS:

Please amend claim 1 and add new claims 13-17, as shown below.

This listing of claims will replace all prior versions and listings of claims in the
Application:

Claim 1 (currently amended): A spectroscopy system for characterizing surface phenomenon
comprising:

at least one light source operable to generate a source beam,

an optical element having an optical surface and a rear surface,

a support block formed in contact with the rear surface of the optical element, the
support block having formed therein [[with]] at least one sample well having a center and at
least one port having a passageway leading from a lower portion of said at least one sample
well, the source beam being aimed at the sample well, the support block being disposed on the
optical surface thereby defining a substantially vertical rear cell surface having a center,

a syringe filled with a membrane solution in fluid communication with a needle having
a distal end disposed in front of the sample well, the distal end being aimed at a point above the
center of the rear cell surface, the syringe be operable to eject a steady stream of membrane
solution from the needle onto the circular rear cell surface thereby forming a membrane
defining at least a portion of a layer under test, the membrane having a substantially uniform
thickness that covers substantially the entire rear cell surface, and

a detector operable to detect light that is at least one of reflected and scattered by the
layer under test.

Claim 2 (original): The system of claim 1 comprising:

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE,
SUITE 140
TUCSON, AZ 85718
TEL. 520.882.7623
FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567

at least one actuator coupled to the syringe and a processor coupled to the actuator wherein the processor is operable to initiate the formation of the membrane.

Claim 3 (original): The system of claim 1 wherein the optical element is at least one of a prism, mirror, lens and optical fiber.

Claim 4 (original): The system of claim 3 wherein the optical surface is at least partially coated with a metallic coating.

Claim 5 (original): The system of claim 4 wherein the metallic coating is at least partially coated a dielectric layer.

Claim 6 (original): The system of claim 1 comprising:

a plurality of syringes each having at least one associated actuator and a processor coupled to the actuators wherein the processor is operable to initiate the delivery of fluids to the sample well.

Claim 7 (withdrawn): A method of forming a membrane in a spectroscopy system comprising:

providing an optical element having an optical surface,

providing a support block formed with at least one sample well having a center, the support block being disposed on the optical surface thereby defining a substantially vertical rear cell surface having a center,

providing a syringe filled with a membrane solution in fluid communication with a needle having a distal end disposed in front of the sample well,

aiming the distal end being at a point above the center of the rear cell surface,

ejecting a steady stream of membrane solution from the needle onto the circular rear cell surface thereby forming a membrane defining at least a portion of a layer under test, the

membrane having a substantially uniform thickness that covers substantially the entire rear cell surface.

Claim 8 (withdrawn): The method of claim 7 comprising:

providing at least one actuator coupled to the syringe and a processor coupled to the actuator wherein the processor is operable to initiate the formation of the membrane.

Claim 9 (withdrawn): The method of claim 7 wherein the optical element is at least one of a prism, mirror, lens and optical fiber.

Claim 10 (withdrawn): The method of claim 9 wherein optical surface is at least partially coated with a metallic coating.

Claim 11 (withdrawn): The method of claim 9 wherein the metallic coating is at least partially coated a dielectric layer.

Claim 12 (withdrawn): The method of claim 7 comprising:

providing a plurality of syringes each having at least one associated actuator and a processor coupled to the actuators wherein the processor is operable to initiate the delivery of the fluids to the sample well.

Claim 13 (new): The system of claim 1, comprising a plurality of syringes each connected to a different supply reservoir.

Claim 14 (new): The system of claim 13, wherein one of the supply reservoirs is a wash solution.

Claim 15 (new): The system of claim 1, wherein the support block comprises three sample wells.

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE,
SUITE 140
TUCSON, AZ 85718
TEL. 520.882.7623
FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567

Claim 16 (new): The system of claim 15, wherein the optical surface includes coated and uncoated portions, and one of the sample wells is located on an uncoated portion of the optical surface.

Claim 17 (new): The system of claim 15, wherein the optional surface includes coated and uncoated portions, and one of the samples well is located on a coated portion of the optical surface.

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE,
SUITE 140
TUCSON, AZ 85718
TEL. 520.882.7623
FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567